

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/DK2005/000203A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07C401/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, CHEM ABS Data, BEILSTEIN Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	CALVERLEY M J: "SYNTHESIS OF MC 903, A BIOLOGICALLY ACTIVE VITAMIN D METABOLITE ANALOGUE" TETRAHEDRON, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 43, no. 20, 1987, pages 4609-4619, XP001147723 ISSN: 0040-4020	1-25, 30, 42, 43
X	page 4612, paragraph 1; compound 15 18 page 4614; compounds 4 27-29 page 4619, paragraph 17	31, 42
X	page 4611 ----- -/-	33, 42

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

7 September 2005

Date of mailing of the international search report

11 10. 2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	STEINMEYER ANDREAS ET AL: "Synthesis and biological activities of a new series of secosteroids: Vitamin D phosphonate hybrids" STERIODS, vol. 66, no. 3-5, March 2001 (2001-03), pages 257-266, XP002328551 ISSN: 0039-128X page 258, scheme 2	1-25,30, 42,43
Y	DAUBEN W G ET AL: "THE SYNTHESIS OF 25 OXO-25-PHOSPHAVITAMIN D-3" TETRAHEDRON LETTERS, vol. 30, no. 6, 1989, pages 677-680, XP002328552 ISSN: 0040-4039 page 678; compounds 7-8	1-25,30, 42,43
Y	M. A. BLANCHETTE ET AL: "HORNER-WADSWORTH-EMMONS REACTIONS: USE OF LITHIUM CHLORIDE AND AN AMINE FOR BASE SENSITIVE COMPOUNDS" TETRAHEDRON LETTERS., vol. 25, no. 21, 1984, pages 2183-2186, XP002328553 NLELSEVIER SCIENCE PUBLISHERS, AMSTERDAM. page 2184; compounds 6-8	1-25,30, 42,43
Y	RESUL B ET AL: "PHENYL-SUBSTITUTED PROSTAGLANDINS: POTENT AND SELECTIVE ANTIGLAUCOMA AGENTS" JOURNAL OF MEDICINAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, WASHINGTON, US, vol. 36, no. 2, 1993, pages 243-248, XP000673914 ISSN: 0022-2623 page 244, scheme II	1-25,30, 42,43
X	SOERENSEN, HANNE ET AL: "In vitro metabolism of Calcipotriol (MC 930), a vitamin D analog" BIOCHEMICAL PHARMACOLOGY , 39(2), 391-3 CODEN: BCPA6; ISSN: 0006-2952, 1990, XP002343619 page 391, column 2, paragraph 3	26,27,42
X	US 5 247 104 A (DELUCA ET AL) 21 September 1993 (1993-09-21) column 1, lines 39-65	32,42
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 87/00834 A (LEO PHARMACEUTICAL PRODUCTS LTD. A/S) 12 February 1987 (1987-02-12) page 5, paragraph 2 page 27, lines 19-28	31, 32, 42
X	* page 22, line 20 - page 23, line 29, preparations 2,3; page 24, lines 15-31, preparation 6 *	33
X	----- DATABASE CA 'Online! CHEMICAL ABSTRACTS SERVICE, COLUMBUS, OHIO, US; OKAMOTO, MASATO ET AL: "Preparation of 1.alpha.,24-dihydroxy-22(E)-dehydrovitamin D3 and its derivatives" XP002343720 retrieved from STN Database accession no. 1997:139652 abstract -& JP 08 325226 A (TEIJIN LTD, JAPAN) 10 December 1996 (1996-12-10) page 5, column 2, paragraph 35 page 6, column 1, paragraphs 38,41 page 7, column 1, paragraph 47-50	37-39
P,Y	WO 2004/037781 A (LEO PHARMA A/S; BINDERUP, ERNST, TORNDAL; HANSEN, KAI, HOLST; BRETTING) 6 May 2004 (2004-05-06) page 18, line 29 - page 19, line 21	1-25
E	WO 2005/051903 A (LABORATORIOS VINAS S.A; BUXADE VINAS, ANTONIO; CONCHILLO TERUEL, ANTON) 9 June 2005 (2005-06-09) page 6; example 2 -----	33, 42